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EXAMINER

NGUYEN, VAN H

ART UNIT PAPER NUMBER

2194

DATE MAILED: 09/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/943,875

Applicant(s)

GENTRY ET AL.

Examiner

VAN H. NGUYEN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 July 2005.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 and 19-36 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-16 and 19-36 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____

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DETAILED ACTION

1. Claims 1-16 and 19-36 are presented for examination.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 19-26 and 36 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.
4. Pages 10-11 of Applicant's specification provide guidance as to what Applicant considers to fall within the scope of the phrase "computer-readable medium" as used in currently pending claims 19-26 and 36. The pertinent portion of pages 10-11 are as follows:

In the context of this document, a "computer-readable medium" can be any means that can contain, store, communicate, propagate, or transport the program for use by or in connection with the instruction execution system, apparatus, or device. The computer readable medium can be, for example but not limited to, an electronic, magnetic, optical, electromagnetic, infrared, or semiconductor system, apparatus, device, or propagation medium. More specific examples (a nonexhaustive list) of the computer-readable medium would include the following: an electrical connection (electronic) having one or more wires, a portable computer diskette (magnetic), a random access memory (RAM) (electronic), a read-only memory (ROM) (electronic), an erasable programmable read-only memory (EPROM or Flash memory) (electronic), an optical fiber (optical), and a portable compact disc read-only memory (CDROM) (optical). Note that the computer-readable medium could even be paper or another suitable medium upon which the program is printed, as the program can be electronically captured, via for instance optical scanning of the paper or other medium, then compiled, interpreted or otherwise processed in a suitable manner if necessary, and then stored in a computer memory.

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5. Thus it is clear that while Applicant has not provided an explicit and deliberate definition limiting the phrase “computer-readable medium,” Applicant has provided an explicit and deliberate definition of items Applicant intends to fall within the scope of “computer-readable medium.” Within this list of items are types of media which would have been recognized by one of ordinary skill at the time of the invention as storage media, propagation or transmission media, and printed matter. It is believed that the types of storage media listed by Applicant would have enabled the recited program logic, when stored thereon, to be read and executed by a computer and realize its functionality. It is not believed, however, that the recited propagation or transmission media would likewise enable the functionality to be realized. Absent recitation of some means for receiving and processing the program, propagation or transmission media are not believed to be, in and of themselves, capable of providing the program in a manner which enables it to be read and executed by a computer, with subsequent realization of its functionality to accomplish a practical application by causing the computer to perform operations with a useful, concrete and tangible result.

6. Certainly, Applicant’s inclusion of a piece of paper with the program printed thereon within the scope of “computer-readable medium” indicates the claims are sufficiently broad to read on non-functional descriptive material, printed matter. Printed matter which fails to be functionally interrelated to its substrate has long been held to be nonstatutory.

From MPEP 706.03(a):

For example, a mere arrangement of printed matter, though seemingly a “manufacture,” is rejected as not being within the statutory classes. See *In re Miller*, 418 F.2d 1392, 164 USPQ 46 (CCPA 1969); *Ex parte Gwinn*, 112 USPQ 439 (Bd. App. 1955); and *In re Jones*, 373 F.2d 1007, 153 USPQ 77 (CCPA 1967).

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7. As such, claims 19-26 and 36 are not limited to embodiments which would enable execution of the program by a computer to realize its functionality and provide a practical application with a useful, concrete and tangible result. Note that any deletions from the specification may raise a question with respect to New Matter.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 1-8 and 27-34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

10. As to independent claims 1 and 27, "the hardware device" (claim 1, line 3 and claim 27, line 3) lacks antecedent basis. Claim 1 and 27 have no "a hardware device" term that defines or supports the given reference.

11. Dependent claims 2-8 and 28-34 are rejected for fully incorporating the deficiencies of their base claims.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 1-5, 8-13, 16, 19-22, 25-30, and 33-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Fleming, III** (U.S. 6,530,018) in view of **Momose** (U.S. 6,822,753).

14. As to claim 1, Fleming teaches (*abstract*) the invention substantially as claimed including a hardware driver install system (*e.g., an installation mechanism*) used in conjunction with a computer system (*e.g., a computer system*), the install system apparatus comprising:

means for determining if the hardware device is connected to the computer system (*e.g., a detection mechanism that detects the presence of a device in a computer system; see the Abstract; col.2, lines 1-15, 21-24; and col.4, lines 54-64*); and

means for installing a driver for the hardware device if it is determined that the hardware device is connected to the computer system (*e.g., installs the current driver on the computer system; abstract; col.5, lines 25-33; and fig. 3*).

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Fleming does teach “*a detection mechanism*”, but is silent on “means for instructing a user to connect the hardware device if it is determined that the hardware device is not connected to the computer system.”

Momose teaches means for instructing a user to connect the hardware device if it is determined that the hardware device is not connected to the computer system (*see fig.11 and the warning dialogue box discussion beginning at col.10, line 13*).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Momose with Fleming because Momose’s teachings would have notified the user when the device is not connected to the computer system, and prompted the user to connect the device to the computer system.

15. As to claim 2, Fleming teaches means for determining if a default driver exists for the hardware device (*e.g., a default driver; col.2, lines 31-34; col.3, lines 40-43; and col.5, lines 3-14*).

16. As to claim 3, while teaching the default driver, the driver, and the hardware device, Fleming does not explicitly teach “replacing the default driver with the driver for the hardware device.”

Fleming, however, discloses “*default driver 113 is used until current driver 116 can be installed*” (col.3, lines 3-14).

It would have been obvious to one of ordinary skill in the art to have applied the teaching of Fleming for “replacing the default driver with the driver for the hardware device” in order to provide means for facilitating the installation of the driver on the computer system. Note that the default driver allows the computer system to function in a restricted performance mode until the

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current the driver is installed, and if the device is a device that must be used during the retrieval process, such as a network interface controller, it may not be possible to perform the retrieval without the default driver.

17. As to claim 4, Fleming teaches means for acquiring the driver from a network source (*e.g., the system retrieves current driver 116 from server 112 across net work 111; col. 5, lines 14-24 and fig. 3*).

18. As to claim 5, Fleming teaches means for determining if there are a plurality of hardware devices connected to the computer system (*abstract; and col.4, line 54-col.5, line 14*).

19. As to claim 8, Fleming teaches means for using a default install system of an operating system for the computer system when installing the driver for the hardware device (*e.g., default driver 113 is used until current driver 116 can be installed; col.3, lines 3-14*).

20. As to claims 9-13 and 16, note the rejection of claims 1-6 and 8 above. Claims 9-13 and 16 are the same as claims 1-6 and 8, except claims 9-13 and 16 are method claims and claims 1-6 and 8 are system claims.

21. As to claims 19-22, 25, and 26, note the rejection of claims 1-3, 5, 4, and 8, respectively. Claims 19-22, 25, and 26 are the same as claims 1-3, 5, 4, and 8, except claims 19-22, 25, and 26 are computer readable medium claims and claims 1-3, 5, 4, and 8 are system claims.

22. As to claim 27, the rejection of claim 1 above is incorporated herein in full. However, claim 27 further recites a user interface. Inherently, a user interface must be included in the Fleming's system to notify the user if the device is connected to the computer system, and to prompt the user to connect the device to the computer system for installing the deriver when the device is not connected to the computer system.

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23. As to claims 28-30, 33, and 34, note the rejection of claims 2-3, 5, 8, and 4, respectively.

24. Claims 6-7, 14-15, 23-24, and 31-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Fleming** in view of **Momnose** as applied to claims 1, 9, 19, and 27 above and further in view of **Nykanen et al.** (U.S. 6,574,678).

25. As to claim 6, the combination of Fleming and Momose does not specifically teach means for determining which of the plurality of hardware devices connected to the computer system are to be removed.

Nykanen teaches means for determining which of the plurality of hardware devices connected to the computer system are to be removed (*figs 5a-5c and associated text*).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Nykanen with Fleming as modified by Momose because Nykanen's teaching would have provided the capability for detecting and identifying the devices connected to the computer system, and removing the unused devices in the computer system. Therefore, facilitating the installation of the driver on the computer system.

26. As to claim 7, Nykanen teaches means for removing the plurality of hardware devices from a device object that are determined to be removed; and means for removing any shortcut for the plurality of hardware devices that are determined to be removed from the computer system (*col.6, line 30-col.7, line 56*).

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27. As to claims 14-15, note the rejections of claims 6-7 above. Claims 14-15 are the same as claims 6-7, except claims 14-15 are method claims and claims 6-7 are system claims.

28. As to claims 23-24, note the rejection of claims 6-7 above. Claims 23-24 are the same as claims 6-7, except claims 23-24 are computer readable medium claims and claims 6-7 are system claims.

29. As to claims 31-32, refer to claims 6-7 above for rejection.

30. Claims 35 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Fleming** in view of **Momnose** as applied to claim 1 above and further in view of **Udelstein et al.** (U.S. 6,378,128 B1).

31. As to claim 35, the rejection of claim 1 above is incorporated herein in full. However, the combination of Fleming and Momose does not specifically teach: determining if an operating system on the computer includes a Windows installer service; if it is determined that the operating system does not include a Windows installer service, then removing any driver for the device provided by the operating system and setting up the operating system to use a driver provided with the device; if it is determined that the operating system includes a Windows installer service, then updating any driver for the device associated with the Windows installer service with a driver provided with the device.

Udelstein teaches determining if an operating system (*e.g., the operating system; col.6, lines 24-32*) on the computer (*e.g., the target computer system; col.6, lines 24-32*) includes a Windows installer service (*e.g., a WINDOWS INSTALLER program module; col.6, lines 24-32*);

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if it is determined that the operating system does not include a Windows installer service (*e.g., operable to detect; col.6, lines 29-32*), then removing any driver for the device provided by the operating system and setting up the operating system to use a driver provided with the device (*e.g., install a new application program module; col.6, lines 29-32*); if it is determined that the operating system includes a Windows installer service, then updating any driver for the device associated with the Windows installer service with a driver provided with the device (*e.g., an "intelligent install module 210 is added to the existing WINDOWS INSTALLER program module to provide functionality for dynamically creating or modifying an install-set; col.6, lines 29-32*).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Udelstein with Fleming as modified by Momose because Udelstein's teaching would have provided the capability for dynamically creating and modifying an install-set, without user interaction, to accommodate the needs of an individual user and/or the requirements of an individual computer system.

32. As to claim 36, note the discussion of claim 35 above for rejection.

Conclusion

33. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Goshey et al. (US 6934722) "Method of finding application components in an intelligent backup and restoring system"

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Yao et al. (US 6813670 B1) "Automatic server-side plug-and-play without user intervention"

Brockway et al. (US 6789111 B1) "Automatic detection and installation of client peripheral devices by a server"

Yeh (US 5852743 A) "Method and apparatus for connecting a plug-and-play peripheral device to a computer"

34. Any inquiry or a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: (571) 272-2100.
Any inquiry concerning this communication or earlier communications from the examiner should be directed to VAN H. NGUYEN whose telephone number is (571) 272-3765. The examiner can normally be reached on Monday-Thursday from 8:30AM - 6:00PM. The examiner can also be reached on alternative Friday.
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor Meng-Ai An can be reached on (571) 272-3756.
The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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